### MEMORANDUM

#### To: CHAIR AND COMMISSIONERS CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: January 30-31, 2025

From: STEVEN KECK, Chief Financial Officer

Reference Number: 4.8, Information Item

Prepared By: Ann Fox

District 11 - Director

#### Subject: UPDATE ON THE SAN DIEGO-CORONADO BAY BRIDGE FOUNDATION REHABILITATION PROJECT ON STATE ROUTE 75 IN SAN DIEGO COUNTY

#### SUMMARY:

The California Department of Transportation (Department) presents the Project Update Report as the second update of the San Diego-Coronado Bay Bridge Foundation Rehabilitation Project EA 11-40940 to the California Transportation Commission (Commission) at its January 2025 meeting as an informational item. The report provides a progress update, total amount expended for the Project Approval and Environmental Document (PA&ED) phase, status of risks, and a 2025 project look ahead.

#### **BACKGROUND:**

The San Diego-Coronado Bay Bridge is part of State Route 75 and was opened to traffic in August 1969. The five lane bridge crosses over the San Diego Bay and serves motorists traveling between the City of San Diego and City of Coronado. In October 2022, the Commission approved the Department's supplemental funds request in the amount of \$18.9 million for the remaining PA&ED phase effort. Supplemental funds are being used to determine the bridge foundation rehabilitation strategy, to analyze the existing bridge fenders, to determine if and what bridge fender improvements may be warranted, and to complete the environmental effort. Due to the magnitude of the supplemental funds request and magnitude of the overall project, Commission staff requested the Department to provide annual updates beginning January 2024.

Attachment: Annual Project Update Report



### San Diego-Coronado Bay Bridge Foundation Rehabilitation Project 11-40940, Project ID 1112000071

# December 18, 2024

# **Second Annual Project Update**



### TABLE OF CONTENTS

1.	INTRODUCTION/BACKGROUND	. 3
2.	SCHEDULE	. 5
3.	2024 PROGRESS UPDATE	. 6
4.	EXPENDITURES TO DATE	. 6
5.	RISK	.7
6.	LOOK AHEAD FOR CALENDAR YEAR 2025	.7



#### 1. INTRODUCTION/BACKGROUND

This report serves as the second annual project update to the California Transportation Commission (CTC) regarding the San Diego-Coronado Bay Bridge (SDCBB) Foundation Rehabilitation project (EA 11-40940). In October 2022, CTC staff requested Caltrans provide annual updates beginning January 2024.

#### **Project Location**





The SDCBB is part of State Route 75 and was opened to traffic in August 1969. The SDCBB is part of the Strategic Highway Network (STRAHNET), which is a designation given to highways that provide defense access continuity, and emergency capabilities for movements of personnel and equipment. It serves as the primary route between the City of San Diego and the City of Coronado. Approximately 70,000 vehicles travel across the bridge daily. Coronado is home to several military installations including Naval Air Station North Island (NASNI), which is home port to three aircraft carriers.

The United States Department of Defense has designated the San Diego Harbor as a National Strategic Seaport. Located southeast of the SDCBB is Naval Base San Diego (NBSD), which is the second largest surface ship base in the United States Navy and is the principal homeport of the Pacific Fleet. These Naval ships must pass under the SDCBB to reach NBSD and must also travel under the bridge to exit the San Diego Bay to the Pacific Ocean.

Also located southeast of the SDCBB is the National City Marine Terminal. Cargo vessels going to and from the National City Marine Terminal must also pass under the SDCBB.

A major earthquake or accidental vessel impact that causes damage or bridge collapse would prevent travel, military readiness, and commerce from San Diego.

The SDCBB foundations are routinely inspected to assess the condition of the bridge. Following underwater pile inspections in 2013, the project was programmed in the 2016 SHOPP as a long lead project with an initial amount of \$2.6M to fund a preliminary structural analysis to evaluate the need for the rehabilitation of the SDCBB foundations located in the San Diego Bay. There are a total of 22 piers located in the San Diego Bay which are supported by 499 waterway piles.

Due to the location of the bridge in the San Diego Bay and how the proposed project scope can affect stakeholders, project development requires extensive involvement from key stakeholders, which includes the United States Navy, United States Coast Guard, Port of San Diego, and United States Army Corps. Coordination and partnering is needed to ensure continued accessibility to the region's strategic port.

The project is being pursued through a phased decision process that includes the following steps:

Step 1 (Summer 2015 – Spring 2019) Project Initiation Document was approved to perform a preliminary structure analysis and to conduct a peer review for input by an outside panel of experts. It was recommended replica pile testing be performed to confirm the analysis results.

Step 2 (Spring 2019 – Summer 2022) Replica pile testing was completed at the University of California San Diego Powell Laboratory. Testing results confirmed substantial foundation rehabilitation work would reduce the risk of a bridge collapse during a major earthquake.



Step 3 (Summer 2022 – Winter 2022) A Supplemental Funds request was approved by the CTC in the amount for \$18.9M to complete the environmental process. This supplemental funds request included additional funding to evaluate whether the existing bridge protection system is in compliance with current American Association of State Highway and Transportation Officials (AASHTO) standards. Funding was also included to develop bridge protection alternatives to prevent a collapse like the Francis Scott Key Bridge and Sunshine Skyway Bridge.

Step 4 (Winter 2022 – Winter 2025): Initial stakeholder engagement, develop formal bridge foundation rehabilitation alternatives, analyze existing bridge fenders to evaluate the need for improvements, develop formal bridge protection alternatives, and perform environmental studies for inclusion in the Environmental Impact Report/Environmental Impact Statement (EIR/EIS). Refer to 2024 progress updates beginning on the next page for more information.

Step 5 (Winter 2025 – Winter 2026): Develop Draft Project Report and Draft EIR/EIS.

Step 6 (Spring 2027 – Winter 2028): Public Review, Develop final Project Report and EIR/EIS.

#### 2. <u>SCHEDULE</u>

The project remains on schedule holding the planned PA&ED Phase completion date of December 2028. Table 1 includes actual and planned milestones for the PA&ED phase.

Description	Date
Approved Project Initiation Document	June 2015 (Actual)
Program Project	March 2016 (Actual)
Approved Supplemental PSR-PDS	August 2022 (Actual)
Begin Environmental Studies	January 2024 (Actual)
Notice of Preparation	Spring 2025
Foundation Rehabilitation and Fender Retrofit Advanced	Winter 2025
Planning Studies Completed	
Draft Environmental Document Completed	Winter 2026
Approved Draft Project Report	Winter 2026
Public Hearing	Spring 2027
PA&ED	Winter 2028

#### Table 1 – Actual and Planned PA&ED Phase Milestones



#### 3. 2024 PROGRESS UPDATE

#### Bridge Foundation Rehabilitation

The project is continuing to evaluate various rehabilitation strategies. The alternatives vary in scope to balance cost, risks, and impacts. The alternative studied in 2024 focused on the lower cost strategy with a smaller footprint. Unfortunately, there are significant constructability concerns associated with this alternative.

#### **Bridge Protection System**

Existing pier fender evaluations and retrofit analysis were conducted. It has been determined that the existing bridge fenders do not provide protection from large vessels. To reduce the risk of a catastrophic collapse from an accidental vessel collision, the design team recently developed two standalone bridge protection alternatives. Both alternatives will significantly reduce the horizontal clearance of the shipping lanes and could have significant right of way impacts. Any reduction in the shipping lane width will require approval from agencies having jurisdictions in the bay. To mitigate risks associated with the standalone bridge protection systems, the team recently began evaluating the feasibility of an integrated bridge protection system.

#### Environmental Studies

A biological study task order was executed, field studies were performed, and a report identifying baseline biological resources and conditions was completed summer 2024.

#### Right of Way

Conversations with the Port of San Diego have begun regarding future contractor access to the San Diego Bay and regarding the desire for a staging area at the shoreline.

#### 4. EXPENDITURES TO DATE

Total PA&ED Phase Budget	\$22.1M
Total Expended Thru December 3, 2024	\$7.5M



#### 5. <u>RISK</u>

The project development team will continue evaluating risks, including those pertaining to the lower cost rehabilitation strategy to determine if this is a viable alternative.

#### 6. LOOK AHEAD FOR CALENDAR YEAR 2025

The team will continue to analyze the foundation rehabilitation strategies, and will continue to assess the constructability challenges associated with the lower cost rehabilitation alternative. The team will also analyze the feasibility of an integrated bridge protection system. Additional environmental studies will be performed, and a public scoping meeting is planned for summer 2025. The team will work with project stakeholders to minimize potential impacts of the project on the movement of ships in the navigational channel, and to participate in the project decision making process.

The next project update report to CTC staff is planned for January 2026.